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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,673	01/21/2004	Ismo Kuivamaki	0837-0162P	1936
2292	7590	01/12/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			BURCH, MELODY M	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,673

Applicant(s)

KUIVAMAKI, ISMO

Examiner

Melody M. Burch

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 21 January 2004.

2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-10 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/21/04.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 4a' mentioned on pg. 8. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rotor of the electric motor recited in claim 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Marked-up Drawings" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

5. The abstract of the disclosure is objected to because the phrase "(figure 1)" at the bottom of the abstract should be deleted. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

6. ~~The following is a quotation of the second paragraph of 35 U.S.C. 112:~~

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 1. The phrase "the friction surface means" in lines 11-12 is indefinite.

It is unclear to the Examiner whether Applicant intends to refer to the first or the second set of friction surface means.

Re: claim 1. The phrase "said means" in line 15 is indefinite. It is unclear to the Examiner as to which means the Applicant is referring to.

Re: claim 1. The phrases "the braking enegagement" and "the force" in lines 19-21 lack proper antecedent basis in the claim.

Re: claim 5. The phrase "means" in the last line of the claim is indefinite. It is unclear to the Examiner as to which means Applicant is referring to.

Re: claim 9. The phrases "the shaft" in line 2, "the hoisting apparatus" in line 5, and "the components" in line 7 lack proper antecedent basis in the claim.

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Re: claim 9. The phrase "a drive shaft" in line 6 is indefinite. It is unclear to the Examiner whether the drive shaft in claim 9 is intended to be the same or different from that earlier recited.

Re: claim 10. The phrase "the hoisting apparatus" in the last line of the claim lacks proper antecedent basis.

~~The remaining claims are indefinite due to their dependency from claim 1.~~

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by

JP-10331864 (JP'864)

Re: claim 1. JP'864 shows in figure 1 a torque controlled brake arranged between a drive shaft 12 and a driven shaft 13, the brake comprising:

a brake disc/clutch disc arrangement arranged between the drive shaft 12 and the driven shaft 13 and comprising a first disc rightmost element 34 that is axially movingly but non-rotatably arranged on the driven shaft 13 and a second disc leftmost element 34 that is axially movingly arranged between the first disc and the drive shaft, a first set of friction surface means arranged between the first disc and the second disc as shown in figure 1 immediately to the right of the second disc, a second set of friction surface means arranged between the second disc and a body 11 of the brake as shown

in figure 1 to the left of the first disc, a spring arrangement 17 arranged to axially press the discs and the friction surface means co-operating therewith against each other in order to achieve a braking engagement, and cam means 20,30,41,50,55 arranged (radially) between the drive shaft and the (top of the) brake disc/clutch disc arrangement, said means comprising a first cam part 20 that is non-rotatably fastened to the drive shaft and a second cam part 55,30 that is non-rotatably arranged on the second disc, the cam means causing by the impact of torque and rotation of the drive shaft and the possible counter torque of the driven shaft the relative axial position between the discs and the friction surface means to change in order to detach at least partly the braking engagement against the force caused by the spring arrangement, wherein the second disc is axially movingly arranged in relation to the second cam part, and that a third set of friction surface means shown in figure 1 between the first and second discs is arranged (radially) between the second cam part and the top of the first disc (and axially between the first disc and the left portions of the second cam part) in order to move the torque from the drive shaft to the driven shaft.

Re: claim 2. JP'864 shows in figure 1 the limitation wherein the third set of friction surface means is arranged on the second part (interpreting the third set of friction surface means to be the outer surface of one of elements 21 arranged between the first and second discs).

Re: claim 4. JP'864 shows in figure 1 the limitation wherein the third set of friction surface means is mounted on the first disc (interpreting the third set of friction surface means to be the left surface of the first disc).

Re: claim 5. JP'864 shows in figure 1 the limitation wherein the body 11 of the brake comprises two parts shown connected at the unnumbered bolt/screw which are axially adjustable in relation to one another whereby the position or point of action of the second set of friction surface means can be adjusted and restricted by means of the second body part.

~~Re: claim 6. JP'864 suggests in figure 1 the limitation wherein threads are~~
arranged between the body parts. Examiner notes that the bolt/screw shown connecting the two body parts has threads (a portion of the threads being shown in the small area between the two body parts).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'864 in view of US Patent 5853165 to Kuivamaki.

JP'864 describes the invention substantially as set forth above, but does not include the limitation of the brake being arranged in an electric motor driven chain hoist.

Kuivamaki teaches in figure 2 and in the abstract the use of a brake being arranged in an electric driven chain hoist.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the brake of JP'864 to have been included in an

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electric driven chain hoist, in view of the teachings of Kuivamaki, in order to provide a means of selectively decelerating the lifting action of the device.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'864 in view of US Patent 6352243 to Samejima.

JP'864 describes the invention substantially as set forth above, but does not include the limitation of the brake being arranged in a manually operated chain hoist in which the brake is placed between a hand-operated hoist or the like and the hoisting apparatus.

Samejima teaches in figure 1 the use of a brake being arranged in a manually operated chain hoist in which a brake shown in the area of elements 9, 10, etc. is placed between a hand operated hoist or the like 20 and the hoisting apparatus 13.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the brake of JP'864 to have been included in a manually operated chain hoist, in view of the teachings of Samejima, in order to provide a means of selectively decelerating the lifting action of the device.

Allowable Subject Matter

13. Claims 3, 7, and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 6830141 to Neelakantan et al. and US Patent 4909359 to Fujinami et al. teach the use of a brake/clutch having a driven shaft, a drive shaft, a set of friction surface means, and a cam means with a ball, US Patent 1635708

to Cassel teaches the use of a brake having sets of friction surface means and cam means, US Patent 3313381 to Harting et al. teach the use of a cam means having a circular cross section and kidney shaped grooves with a deep spot in the middle of the groove.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should ~~you have questions on access to the Private PAIR system, contact the Electronic~~ Business Center (EBC) at 866-217-9197 (toll-free).

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January 7, 2005

Melody M. Bunch

1/7/05